

Claim 3, line 4 of the claim: before "penetrate" insert -to-Claim 10, line 4 of the claim: after "source" delete -of-

The claims with the corrections highlighted for the convenience of the Office are shown below.

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- 1. A system for irradiating a product with a source of radiation comprising, in combination,
- a) a source providing radiation to penetrate and irradiate the product; some of the radiation [and] exiting the product; and
- b) a reflector of a high density, low Z material positioned to receive radiation exiting the product and to reflect back a [some] portion of the radiation exiting the product to re-irradiate said product.
- 3. A method of irradiating a selected product comprising, in combination,
- a) directing radiation of sufficient energy to cause some of said radiation **to** penetrate and exit the product;
- b) positioning a reflector of a selected high density, low Z material at least three quarters inch thick to receive radiation exiting the product and to reflect said radiation; and
- c) directing the reflected radiation back to irradiate said product.
- 10. A system for irradiating with X-rays a product which product has top, bottom and sides surfaces comprising, in combination.
- a) a source [of] for providing X-rays directed to irradiate the top surface of the product;
- b) said source of X-rays providing X-rays suitable for penetrating at least 4 cms of water equivalent product;



- c) a reflector of a high density, low Z material positioned to receive X-rays exiting the product and to reflect back a major portion of the X-rays exiting the product to re-irradiate said product;
- d) said reflector being of boron carbide and being of a thickness of at least 10 cms in thickness,
- e) said reflector being configured to reflect X-rays back to the sides of the product as well as to the bottom of the product; and
- f) said reflector being positioned adjacent the bottom surface and side surfaces.

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